TWO NEW LYCAENID BUTTERFLIES FROM THE EASTERN CAPE PROVINCE

Nos. 3 and 4

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A new *Lepidochrysops* Hedicke

This beautiful blue member of its Genus was caught for the first time on the 23rd November 1984 on the highest peaks of the Baviaanskloof Mountains at the source of the Baviaans River. In the description hereunder, comparisons will be made with its congeners, *Lepidochrysops australis* Tite and *Lepidochrysops braueri* Dickson, and also with *Lepidochrysops outeniqua* Swanepoel and Vari.

Lepidochrysops **poseidon** spec. nov.

The body and ancillary parts are similar to that of *Lepidochrysops australis*, although the hairs on the thorax and abdomen are darker.

Male Forewing length: 17 – 20mm.
The apex of the forewing is more rounded than in *australis*, while the hindwing is less elongated in the vicinity of veins 5 and 6.

Upperside: The ground-colour is a plain dark blue, conspicuously lacking the purple sheen in the blue of *australis*, and the violet sheen in the blue of *outeniqua*; it also exhibits none of the light powdery blue characteristic of *braueri*. There is a very broad black margin on both wings, being in some cases up to 4mm wide. This margin is therefore broader than in either *braueri* or *australis*, being similar to that of *outeniqua*. The transition from the black margin to the blue ground-colour is not clear-cut, as is the case with *australis* and *braueri*, but is more gradual, with the black and blue markings noticably more suffused. The discocellular mark on the forewing is extremely broad, being much more well-developed than in all three of the afore-mentioned species. The corresponding mark on the hindwing is much narrower than that of the forewing.

The marginal row of spots on the hindwing is generally noticably less distinct than in *braueri* or *australis*, although a certain amount of variation does exist between individuals. The cilia are white, chequered with black, and the veins are distinctly black.

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KEY TO PLATE

Fig. 1 *Aloeides pallida jonathani* Paratype. Male upperside. Fig. 2 Idem. Paratype. Female upperside. Fig. 3 Idem. Paratype. Male underside. Fig. 4 Idem. Paratype. Female underside. Fig. 5 *Lepidochrysops poseidon* Holotype. Male upperside. Fig. 6 Idem. Allotype. Female upperside. Fig. 7 Idem. Allotype. Male underside. Fig. 8 Idem. Allotype. Female underside.

Underside: The ground-colour is a dark grey-brown, much darker than in *australis*, and markedly greyer than in *outeniqua*.

As is the case with the entire *australis* complex, the basic pattern and positioning of the underside markings is the same, so will not be repeated in this description. However, the series of sagittate markings occurring postmedially in the hindwing tend to be narrower and less clearly defined than in *australis*, while the six discal spots of the hindwing are much less elongated. The spacing between the two black spots along the costa of the hindwing, as well as between the discocellular lunule and the black spot in the cell is also narrower than in *australis*, and not as suffused with white. This species may be fairly easily distinguished from *braueri* in that the seven postmedian spots of the forewing are narrower, and are curved inwardly in area 4. In *braueri*, these spots are always arranged in a straight line between vein 1a and vein 7. The series of white streaks beyond these spots is also markedly more lunulate than in *braueri*.

The species differs markedly from *outeniqua* by its comparatively more pronounced white markings, and in particular, by the more blunt sagittate markings on the hindwing.

Female Forewing length: 20 – 22mm.
Wings more rounded and more elongated than in the male.

Upperside: Ground-colour as in the male, but there is a far greater invasion of black into the areas of blue. In the case of the allotype, the wings are so heavily marked with black that the only blue which is evident is in areas 1a and 1b of the forewing, and in the immediate vicinity of the cell in the hindwing. In the case of the other specimens examined, the invasion of black is not as extreme. There is, in these specimens, a very broad costal and outer marginal black border on both wings. In the forewing, this black edging is extended further inwards in areas 1a and ab. All specimens examined show a very pronounced discocellular spot in the forewing, and a much narrower discocellular lunule in the hindwing. In all specimens, there is evidence of 5 elongated discal spots in areas 5, 4, 3, 2, and 1a of the forewing, and a further two discal spots in areas 4 and 5 of the hindwing. There is a pronounced marginal spot in area 2 of the hindwing; this is dark, with a blue ring, and bordered inwardly with a faint orange lunule. The cilia and the veins are as in the male.

Underside: The underside is the same as in the male, except that the white edging around the seven postmedian spots in the forewing is less pronounced. The ground-colour is also less grey, being of a slightly more brown colouration.

Genitalia: Comparisions made with the male genitalia of typical *australis* from the vicinity of Eseljagt in the South-West Cape has revealed very few differences between these two species. However, the terminal hook of the falces of this species is more fully semi-circular in its conformation; and the distal section which follows the tubular portion of the adeagus has a more pronounced taper from its mid-point to its termination.

This species was discovered by myself, my wife, my father, and Mr. Paul Liversidge on the 23rd November, 1984, in a joint expedition undertaken in order to investigate this hitherto unexplored area.

During the course of the day, a great number of blue *Lepidochrysops* were taken, flying about the highest ridges in the area. It was not until these were pressed that we realised to our astonishment that we had in fact found three separate and distinct species flying together. One of these species was undoubtedly *Lepidochrysops braueri*, while another was very similar to typical *australis* from the South-West Cape. This left a third, hitherto unknown, species, which is now described herein. To my certain knowledge, this is the first occasion that more than two *Lepidochrysops* of the *australis* group have been found flying together, and as such constitutes a small breakthrough in our understanding of the group.

A subsequent trip to the area undertaken by my wife and I on the 8th December, 1984 revealed more specimens, though a great number of these were worn.

The species was encountered singly, flying rapidly about rocky ridges and peaks in the area. It was interesting to note that my wife, my father, and I who were working the highest points in the area, came across specimens only of this new species. Mr. Paul Liversidge, however, who was working lower down, was able to secure all three of the species mentioned. It therefore appears that these three species may each be favouring different altitudes on these mountains: but this must yet be confirmed.

I am extremely grateful to Mr. Paul Liversidge for all his assistance, and in particular, for making his specimens available for research. I am also deeply indebted to Mr. C. G. C. Dickson for his helpful comments, and for undertaking to do the genitalia studies for this paper. My thanks also to Mr. C. W. Wykenham for making specimens of true *australis* available for comparison.

HOLOTYPE:	"Baviaanskloof"	24/11/1984	P. S. Liversidge.
ALLOTYPE:	"Baviaanskloof"	24/11/1984	A. B. Pringle.

PARATYPES: Data as for holotype and allotype 2 ♂ E. L. Pringle; 5 ♂ V. L. Pringle; 3 ♂ P. S. Liversidge; 3 ♂ 8/12/1984 (A.B.P.); 2 ♂ 8/12/1984 (E.L.P.); 2 ♀ 8/12/1984 (E.L.P.).

The holotype and allotype have been deposited at the British Museum (Natural History), London.

NEW SUBSPECIES OF THE GENUS *ALOEIDES* HUBNER

This striking new race of the *Aloeides pallida* (Riley) group was discovered by Dr. Jonathan B. Ball, on the first of his many trips to the Kammanassie Mountains of the Eastern Cape Province. It was subsequently also found in the same area by the author, his wife, and his father over a period of years, from 1981-1984. In this description, comparisons will be made with its only close ally, *Aloeides pallida pallida* (Riley).

Aloeides pallida **jonathani** ssp. nov.

The body and ancillary parts are similar to those of *pallida pallida*, except that in the male the body hairs are more distinctly purple in colour, and the eyes are, in all specimens examined, purple in colour. In all specimens of typical *pallida* examined, the eyes are consistently black in colour.

Male Forewing length: 15 - 19mm.

Upperside: Comes closest to *Aloeides pallida pallida*, except that the orange ground-colour is of a deeper colour, and the black markings are more intense. The extent and shape of these black markings is very similar to *pallida pallida*, but there is a tendency for the apical patch of the hindwing to be more restricted in size. There is a certain amount of variation between individuals in this respect, however, and this diagnostic feature should be treated with some caution.

The distal lunules on the hindwing are very pronounced, and more lunulate than in *pallida pallida*.

As in typical *pallida*, there is very little black scaling on the veins. The cilia are chequered with white, but since they are more heavily invaded by black, are not as pronounced as in typical *pallida*.

Underside: The orange ground-colour of the forewing is deeper than in typical *pallida* and the series of spots on this wing – although similarly placed – are more heavily marked with black, and their white markings comparatively reduced.

The most distinctive diagnostic features of this new race are contained in the hindwing. The ground-colour of this wing is purple, and it is extraordinary to see that none of the great number of specimens examined exhibit a variation towards a brown ground-colour. In all the other known races of *pallida* approximately half the specimens examined have a purple or mauve ground-colour, while the other half are brown.

The tone of this purple ground-colour varies in its depth between individuals and is in some cases invaded towards the base of the wing by a yellowish colouration – again, a phenomenon unique to this race. The characteristic underside markings of the hindwing are not white, as in typical *pallida* but are instead a dark grey, very sparingly flecked with white scales. The median band

is also markedly thicker than is the case with *pallida pallida*, fusing with the discoidal fascia to form a continuous and solid set of markings. The sub-marginal band is also more pronounced, and continuous from vein 7 right up to the anal fold. In most cases, both the median and sub-marginal bands are outwardly edged with black; while in the vast majority of specimens, the marginal dots are entirely absent: in the remainder, they are only very faintly apparent.

Female Forewing length: 19 - 21mm.
The wings are markedly more rounded than in the male.

Upperside: The ground-colour is of a lighter orange than in the male. It is interesting to note that this is consistent in all the specimens examined, whereas in the other races of *pallida*, the males and females normally have an identical ground-colour. In some instances, the females of *pallida littoralis* Tite & Dickson also exhibit a lighter ground-colour than the males – but this is not consistently the case.

As in the male, the black markings on the wings are more intense than in typical *pallida*, while on the hindwing the apical patch is generally smaller, with a certain amount of variation evident between specimens. The distal lunules are extremely pronounced – much more so than in any of the other races of *pallida* – while the cilia are comparatively suppressed.

Underside: As in the male.

The Kammanassie Mountains near Uniondale have proved themselves to be a naturalist's paradise, and a number of new species of Cape fauna have in recent years been discovered there. Among these are three new species of butterfly, all discovered as a result of the tireless work of Dr. J. B. Ball, and it is my pleasure therefore to name this new subspecies – now the fourth new butterfly from these mountains – after him.

These mountains lie between two well-known and extensive ranges of mountains – the Kouga and the Swartberg ranges – from which they are entirely isolated. Their isolation has obviously led to the evolution of the aforesaid species, and one cannot dismiss the possibility that this new subspecies may already have evolved to the point where it can be said to be an entirely new species. After all, it is completely isolated from any of the other known races of *pallida*, and probably has been for thousands of years.

However, a certain amount of variation between individuals, and the basic similarity between this insect and *pallida pallida*, has led me to adopt and perpetuate the present cautious approach towards this group. Only time, and a great deal more field work and research, will tell whether or not I am wrong in my approach.

The insect has been found in a fairly restricted area on flat ground covered with thick *Macchia* – type vegetation, high up in the Kammanassie Mountains. Its habits are the same as those of the other members of this group: once disturbed, it will circle rapidly about, before settling once more on nearby open ground or stones.

HOLOTYPE: "Kammanassie Mountain" 24/12/78 (Dr. J. B. Ball)

PARATYPES: "Kammanassie Mountain"
3 ♂ 24/12/78 (Dr. J. Ball), 1 ♀ 24/12/78 (J.B.B.), 1 ♂ 20/12/79 (J.B.B.), 8♂23/11/1984 (V.L. Pringle), 4 ♂3 ♀ 23/11/1984 (E.L. Pringle), 1 ♂ 23/11/1983 (A. B. Pringle), 4 ♂ 1 ♀ 23/11/1983 (E.L.P.), 1 ♂ 2 ♀ 16/12/1983 (A.B.P.), 1♂ 1 ♀ 12/12/1981 (E.L.P.).

MYLOTHRIS CHLORIS AGATHINA (CRAMER) IN THE EXTREME WESTERN CAPE – I was most interested in the plate accompanying Messrs. Claassens and Dickson's paper concerning the above species (*Ent. Rec.* **98**:1-4). The figures are rather small, but writing from memory (my own descriptions and black and white photographs are in the British Museum (Natural History)) I can detect no difference between the Western Cape larvae and those from the Kenya coastal strip, and also those of the nomino-typical subspecies from Kampala. I have no recollection of any dull-red or red-brown intersegmental bands.

The authors unfortunately give no description of the pupa, but from the figure it would appear to be predominately brown. This is completely unlike pupae from the Kenya coastal strip, and also of the nomino-typical form from Kampala, whose pupae are black and white.

The principal foodplant of both sub-species bred by me is *Loranthus* spp. with *Osyris absyssinica* (Santalaceae) as an occasional alternative. D. G. SEVASTOPULO, PO Box 95617, Mombasa, Kenya.

MACROGLOSSUM STELLATARUM L. IN SOUTH DEVON – Single specimens of the humming-bird hawkmoth feeding on valerian at the north end of Slapton Sands were observed on 25th and 27th June and on 1st, 3rd, 13th and 14th July 1986. On 27th June a specimen turned up in my garden m.v. trap, some four miles from Slapton Sands. H. L. O'HEFFERNAN, 24 Green Park Way, Chillington, Devon TQ7 2HY.